

Title (en)  
STATIC ANNULAR SEALING SYSTEMS AND INTEGRATED MANAGED PRESSURE DRILLING RISER JOINTS FOR HARSH ENVIRONMENTS

Title (de)  
STATISCHE RINGFÖRMIGE DICHTUNGSSYSTEME UND INTEGRIERTE BOHRSTEIGVERBINDUNGEN MIT DRUCKMANAGEMENT FÜR  
RAUE UMGEBUNGEN

Title (fr)  
SYSTÈMES D'ÉTANCHÉITÉ ANNULAIRES STATIQUES ET JOINTS DE COLONNE MONTANTE DE FORAGE À PRESSION COMMANDÉE  
INTÉGRÉS POUR ENVIRONNEMENTS HOSTILES

Publication  
**EP 3874119 A4 20220720 (EN)**

Application  
**EP 19880231 A 20190916**

Priority  
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• US 2019051245 W 20190916

Abstract (en)  
[origin: WO2020091900A1] A harsh environment integrated MPD riser joint includes a dynamic annular sealing system, a static annular sealing system disposed directly below the dynamic annular sealing system, and a flow spool, or equivalent thereof, disposed directly below the static annular sealing system. The dynamic annular sealing system may be a conventional ACD-type, RCD-type, or other conventional annular sealing system. The static annular sealing system may include one or more annular packer systems and one or more connection sealing elements that engage drill pipe during connection or non-rotation operations only. The dynamic annular sealing system may maintain annular pressure during drilling operations while the static annular sealing system is disengaged. The static annular sealing system may maintain annular pressure during connection operations while the dynamic annular sealing system is disengaged. Advantageously, the static annular sealing system is capable of withstanding jarring heaving action encountered in harsh environments.

IPC 8 full level  
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CPC (source: EP US)  
**E21B 17/01** (2013.01 - EP); **E21B 17/085** (2013.01 - US); **E21B 21/001** (2013.01 - US); **E21B 21/08** (2013.01 - EP); **E21B 33/06** (2013.01 - EP); **E21B 33/064** (2013.01 - US); **E21B 33/085** (2013.01 - EP US); **E21B 33/1208** (2013.01 - US)

Citation (search report)  
• [A] WO 2014179532 A1 20141106 - AMERIFORGE GROUP INC [US], et al  
• [A] US 2017067295 A1 20170309 - GILMORE DAVID L [US], et al  
• [A] US 2015034326 A1 20150205 - HANNEGAN DON M [US], et al  
• [A] US 2013168578 A1 20130704 - LEUCHTENBERG CHRISTIAN [SG], et al  
• See references of WO 2020091900A1

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